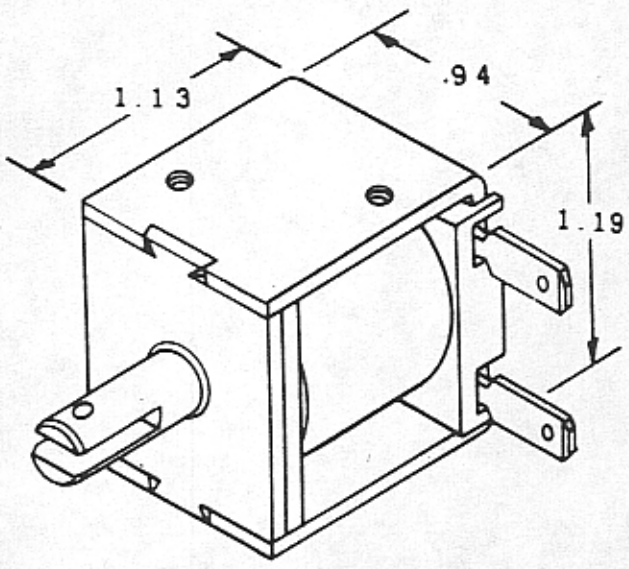
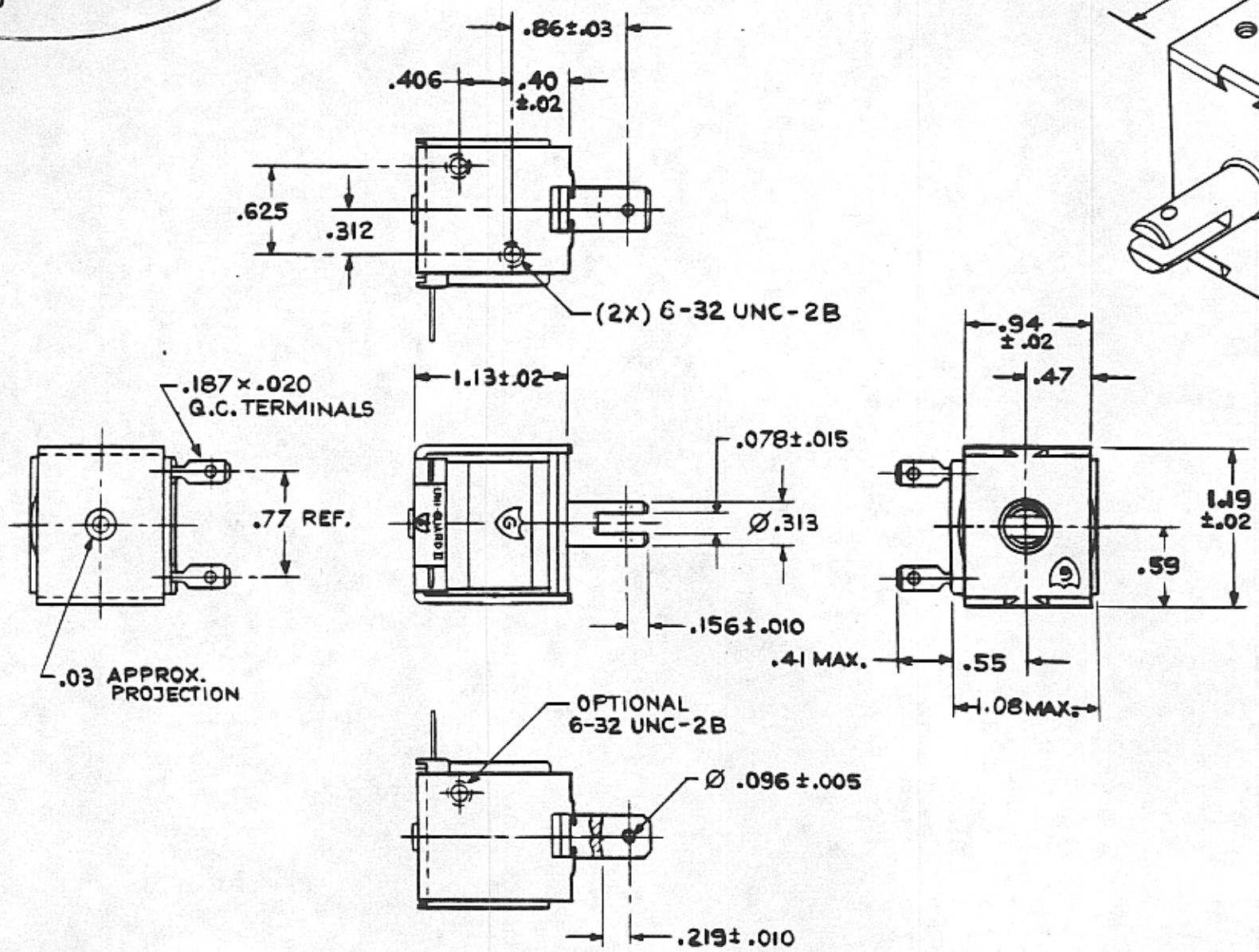
No. 28DC

P/N 131991

Pg 1 of 4





EQUIVALENT in	mm
1.190	30.23
1.130	28.70
1.080	27.43
0.940	23.88
0.860	21.84
0.770	19.56
0.625	15.88
0.590	14.99
0.550	13.97
0.470	11.94
0.410	10.41
0.406	10.31
0.400	10.16
0.313	7.95
0.312	7.92
0.250	6.35
0.219	5.56
0.187	4.75
0.156	3.96
0.096	2.44
0.078	1.98
0.030	0.76
0.020	0.51
0.015	0.38
0.010	0.25
0.005	0.13
0.002	0.05

DATA AND SPECIFICATIONS

TYPICAL COILS

VOLTAGE	CONTINUOUS 5 Watts			INTERMITTENT 13.5 Watts		
	COIL No	OHMS	NI	COIL No	OHMS	NI
6 DC	14	7.5	696	10	3.03	1106
12 DC	20	29.8	691	16	11.9	1096
24 DC	26	116	696	22	47.4	1094
120 AC FWR	39	2387	662	35	920	1068

TYPICAL OPERATE TIME

62 Deg Plunger Cone Angle	N I (Ampere Turns) 1000	2000	5000
P U L L I N (Maximum)	70 ms	30 ms	20 ms
D R O P O U T (Maximum)	50 ms	60 ms	75 ms

Position = Plunger Down
Stroke = .15 in (3.81 mm)
Load = 2.8 oz (78 gms)

POWER INPUT RANGE:

Minimum		1	Watts
Maximum	(Continuous Duty)	5	Watts
1 Sec on	(Pulse Duty)	100	Watts
10 Sec on	(10% Duty Cycle)	40	Watts
100 Sec on	(25% Duty Cycle)	13.5	Watts

U/L RECOGNITION:
Recognized under the Component Recognition Program of Underwriters Laboratories Inc.

MAJOR DIMENSIONS:

Length	1.14 in	(29	mm)
Width	1.07 in	(27	mm)
Height	1.19 in	(30	mm)
Plunger Diameter	.313 in	(8	mm)
Maximum Stroke	.600 in	(15	mm)

DIELECTRIC WITHSTAND: ..... 1500 Volts 60 Hz.

COIL LUGS:
Standard .187 in (4.8 mm) by .020 in (.51 mm)
Also available ... Leads, leads with terminals or other terminal types.

INSULATING MATERIALS: (Class "105" Standard)
Coil Bobbin ..... Polyester
Coil Cover (Standard) ..... Polyester
Also available ....Special Hi-Temp Materials

WEIGHT:
Plunger ..... .46 oz (13 gms)
Total ..... 3.5 oz (100 gms)

PLUNGER CONE ANGLE:
Standard ..... 62 Degrees
Also available ..... Flat, 92 Deg, Custom

Available in push type action. See page 3.

Also available in AC version. See page 202

Pg 2 of 4

COIL DATA CHART**

No. 28DC

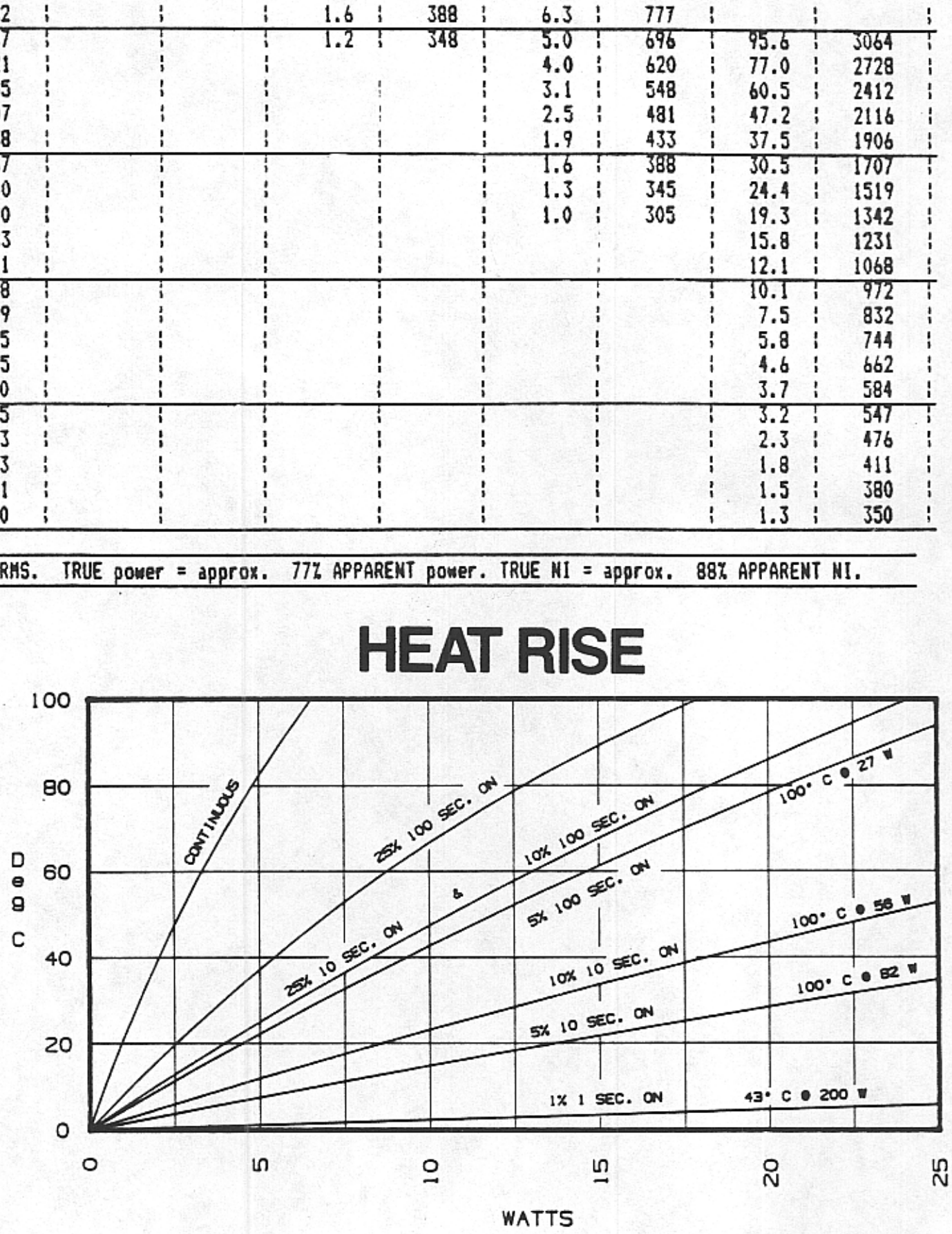
1 to 100 Watts at + 23 degrees C. * = Full wave rectified unfiltered, RMS

Coil No.	Wire Size	Coil Ohms	Total Turns	6 Volts Watts	6 Volts DC NI	12 Volts Watts	12 Volts DC NI	24 Volts Watts	24 Volts DC NI	120 Volts Watts	120 Volts AC * NI
1	20.5	0.38	199	95.1	3155						
2	21.0	0.49	228	73.9	2808						
3	21.5	0.60	250	60.0	2502						
4	22.0	0.77	285	46.5	2210						
5	22.5	0.97	319	37.1	1973						
6	23.0	1.22	359	29.5	1765						
7	23.5	1.50	391	24.0	1567	96.2	3133				
8	24.0	1.93	450	18.6	1396	74.4	2791				
9	24.5	2.41	500	15.0	1247	59.8	2493				
10	25.0	3.03	558	11.9	1106	47.6	2213				
11	25.5	3.84	631	9.4	986	37.5	1973				
12	26.0	4.80	698	7.5	873	30.0	1746				
13	26.5	6.0	779	6.0	777	23.9	1554	95.8	3109		
14	27.0	7.5	875	4.8	696	19.1	1392	76.4	2784		
15	27.5	9.4	975	3.8	620	15.3	1240	61.1	2481		
16	28.0	11.9	1088	3.0	548	12.1	1096	48.4	2193		
17	28.5	14.8	1205	2.4	489	9.7	978	38.9	1955		
18	29.0	18.4	1355	2.0	441	7.8	882	31.2	1764		
19	29.5	23.6	1524	1.5	388	6.1	776	24.4	1552		
20	30.0	29.8	1714	1.2	345	4.8	691	19.3	1381		
21	30.5	36.5	1894			3.9	623	15.8	1247		
22	31.0	47.4	2162			3.0	547	12.1	1094		
23	31.5	59.5	2416			2.4	487	9.7	974		
24	32.0	71.7	2640			2.0	442	8.0	884		
25	32.5	92.1	2982			1.6	388	6.3	777		
26	33.0	116	3367			1.2	348	5.0	696	95.6	3064
27	33.5	144	3721					4.0	620	77.0	2728
28	34.0	183	4185					3.1	548	60.5	2412
29	34.5	235	4707					2.5	481	47.2	2116
30	35.0	296	5338					1.9	433	37.5	1906
31	35.5	363	5867					1.6	388	30.5	1707
32	36.0	455	6540					1.3	345	24.4	1519
33	36.5	573	7290					1.0	305	19.3	1342
34	37.0	702	8183							15.8	1231
35	37.5	920	9301							12.1	1068
36	38.0	1098	10108							10.1	972
37	38.5	1474	11609							7.5	832
38	39.0	1912	13475							5.8	744
39	39.5	2387	14955							4.6	662
40	40.0	3029	16750							3.7	584
41	40.5	3427	17755							3.2	547
42	41.0	4731	21343							2.3	476
43	41.5	6271	24393							1.8	411
44	42.0	7276	26171							1.5	380
45	42.5	8503	28170							1.3	350

* Full Wave, rectified, unfiltered, RMS. TRUE power = approx. 77% APPARENT power. TRUE NI = approx. 88% APPARENT NI.

NOTE: **Coil Data Chart to be used in conjunction with charts on following page. See instructions on pages 4 and 5.

HEAT RISE

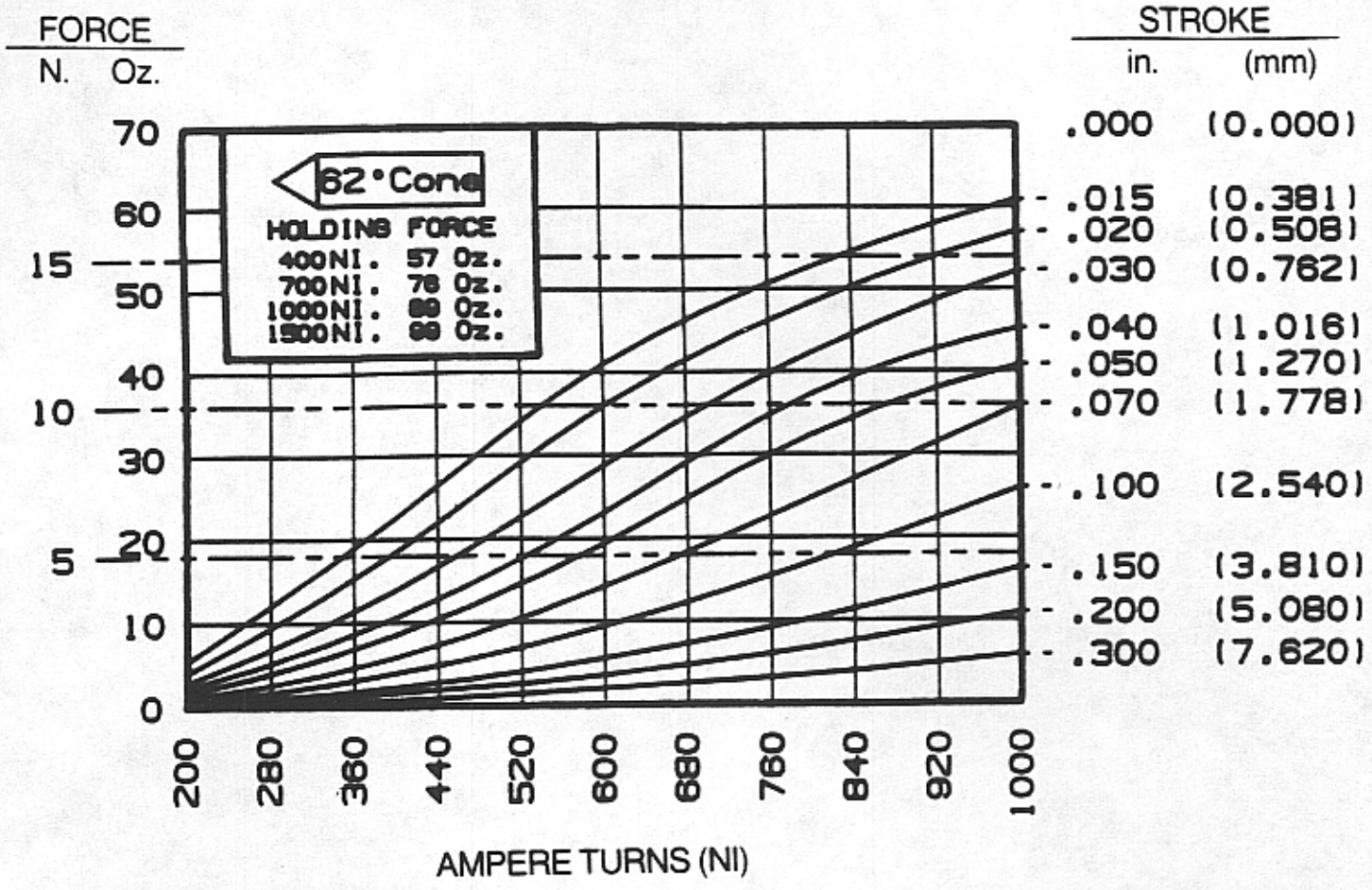


DC FRAME

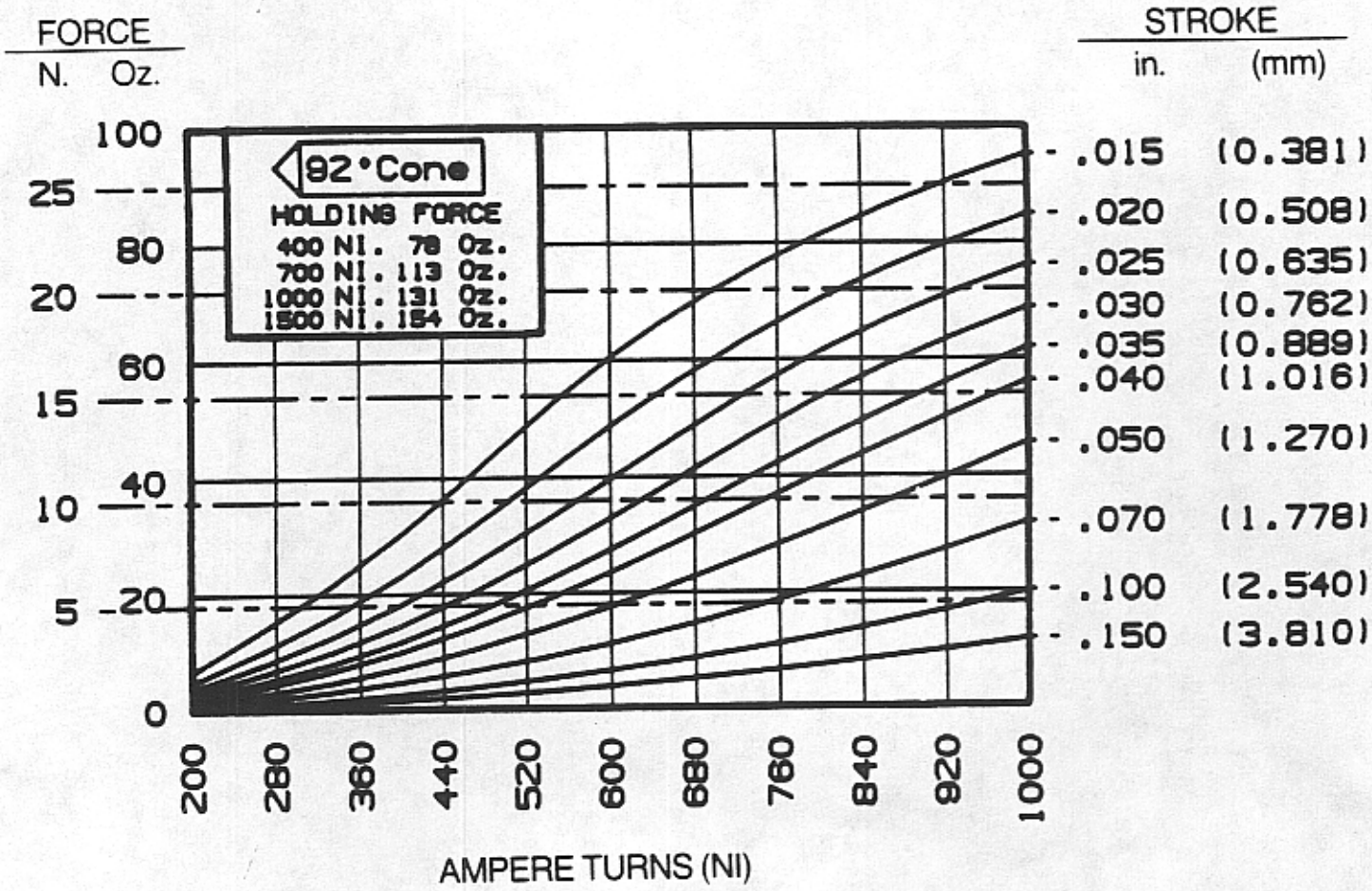
No. 28DC

Pg 3 of 4

62° Cone



92° Cone



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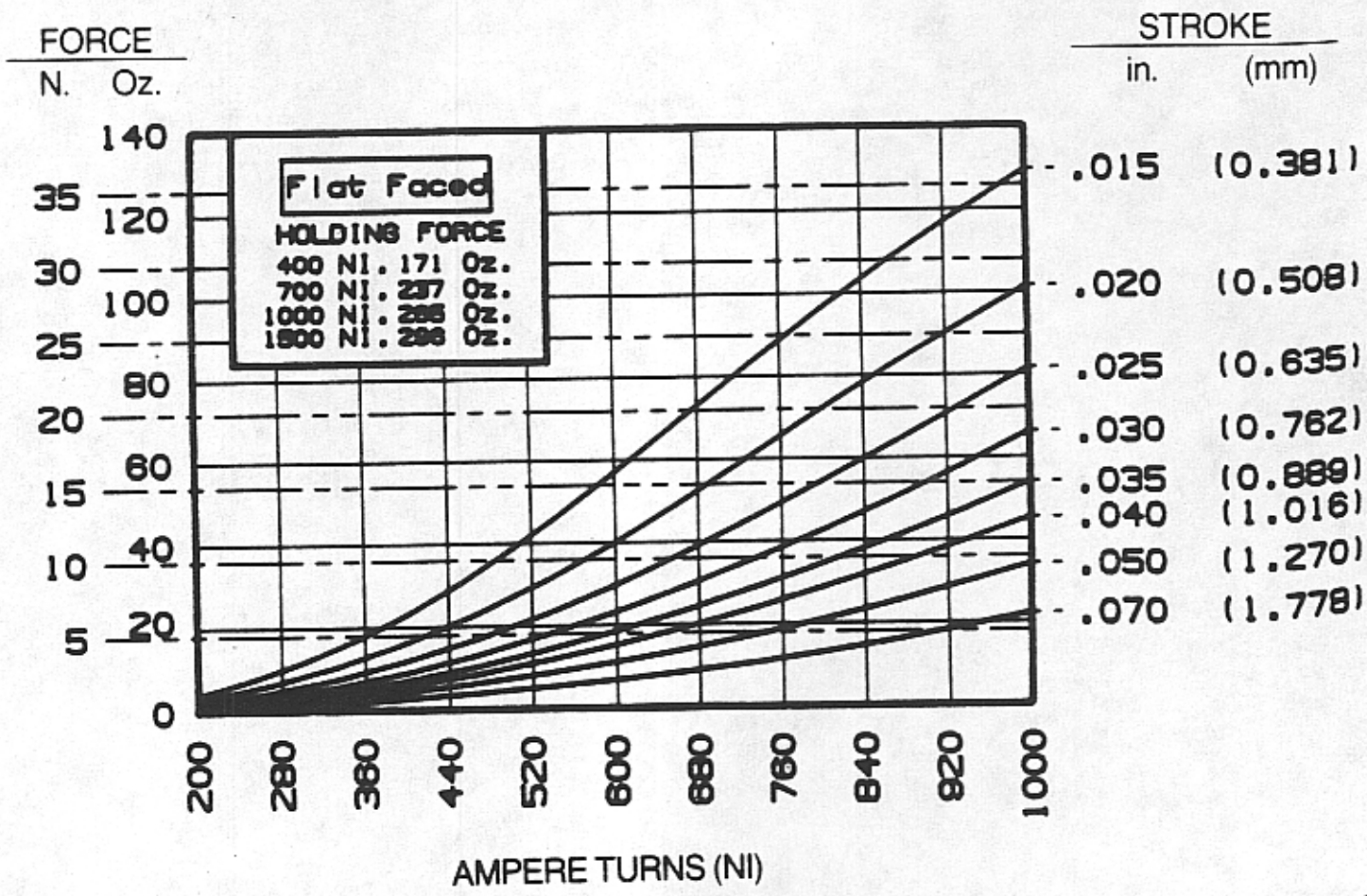
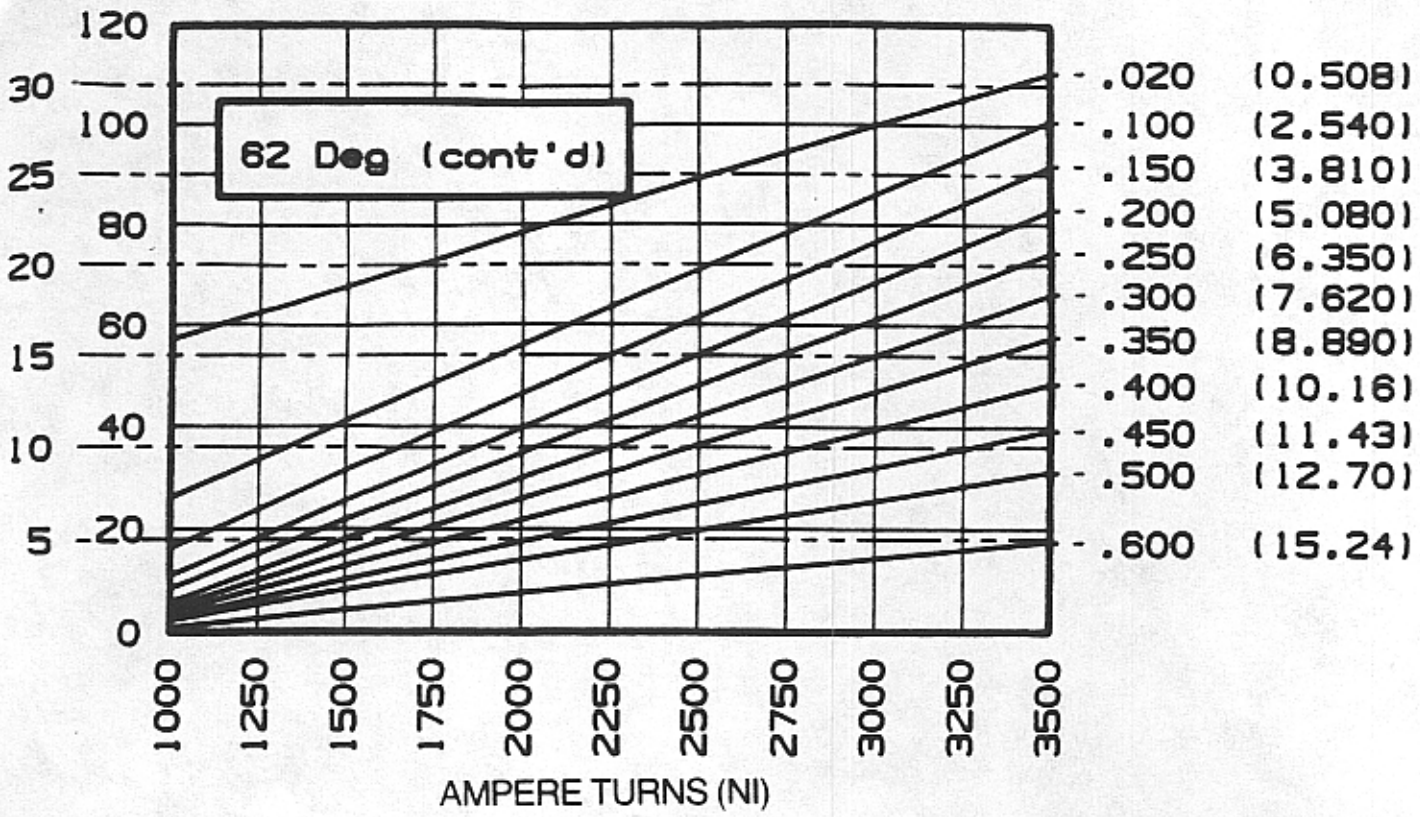
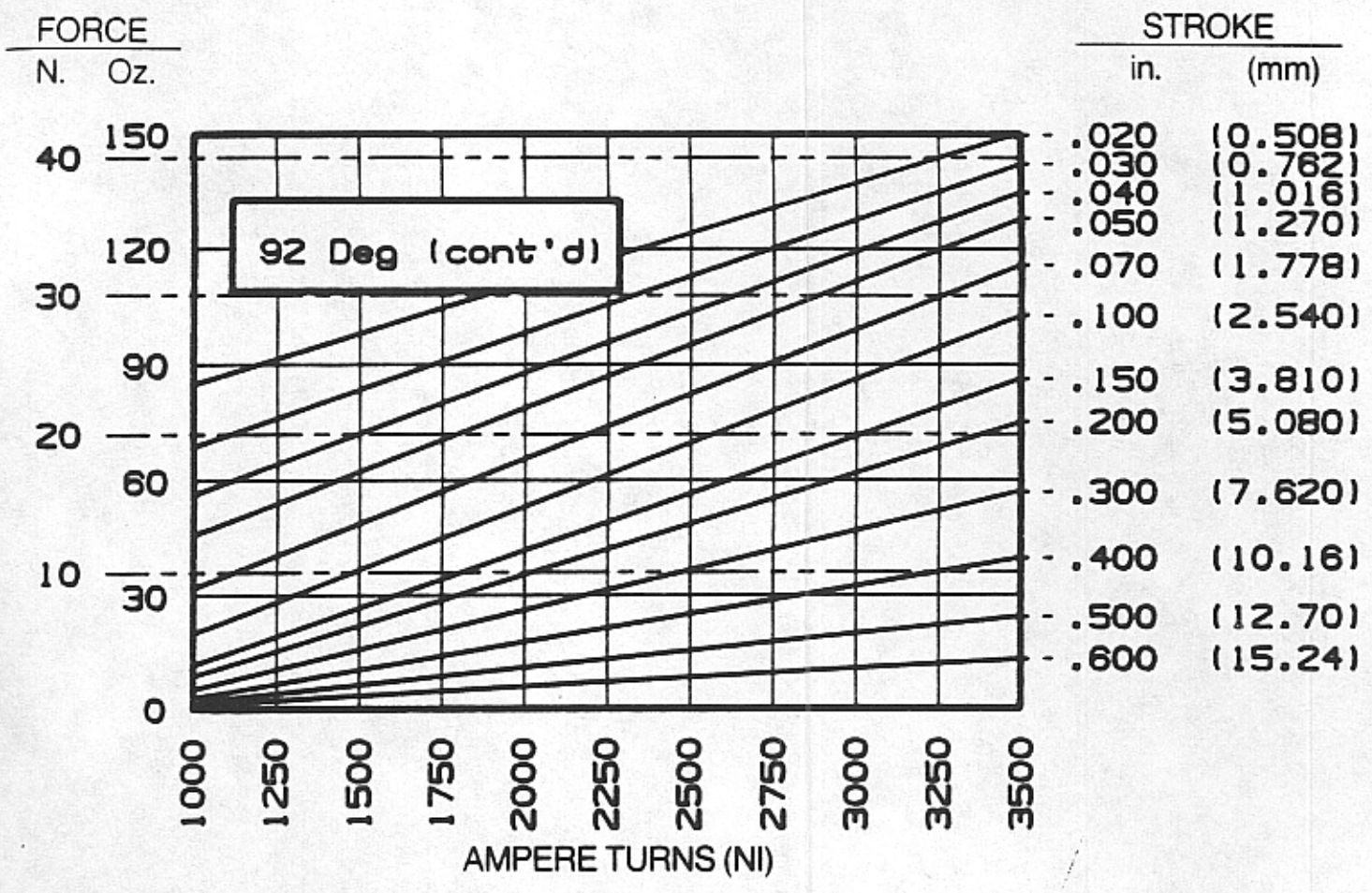




62° Cone
Continued



92° Cone
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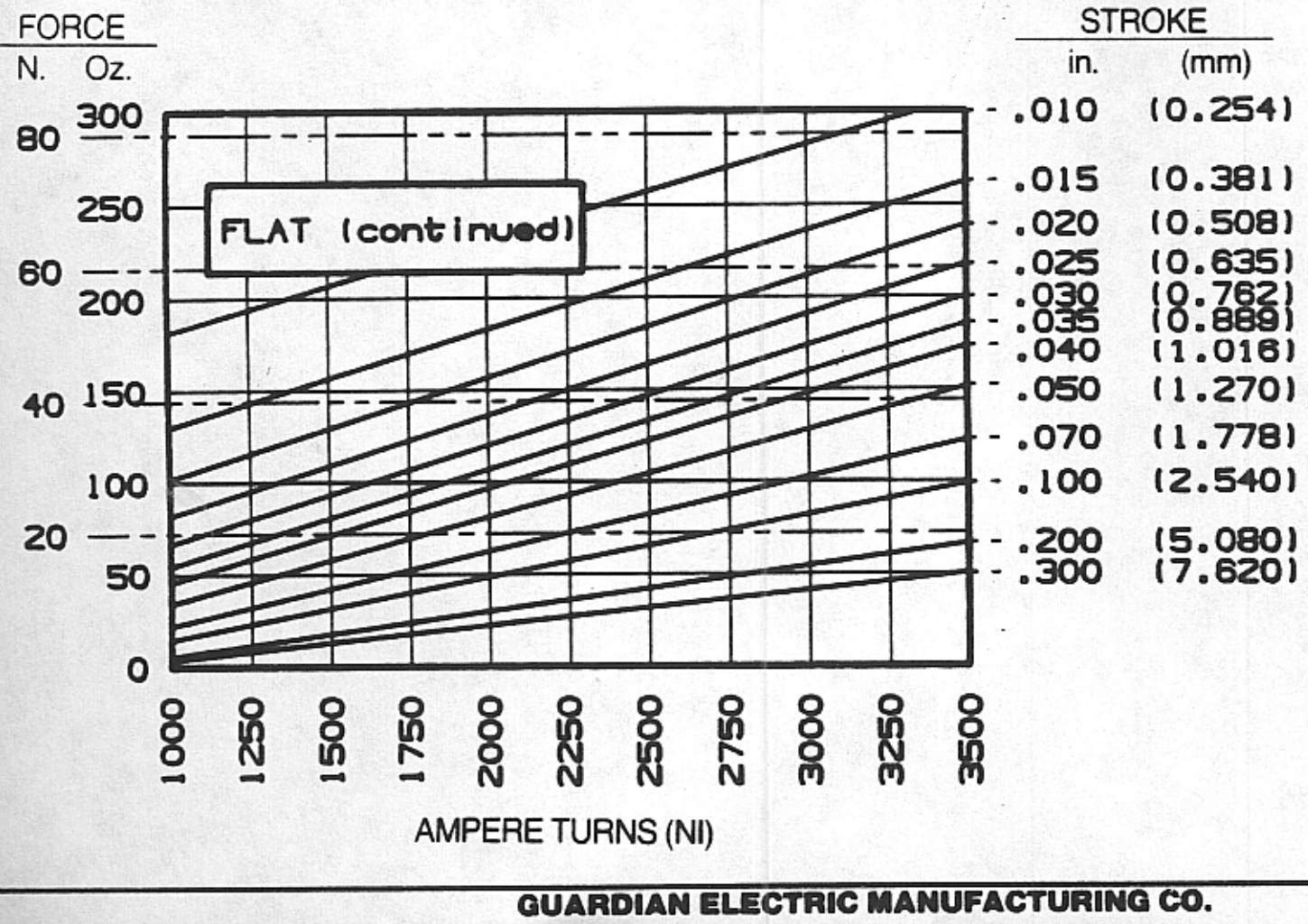

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